Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E; crib; script; suite; UG; DevG; Qref; AdmG
	To be Assigned or Discussed							
4656	THEMIS Orbits - Discuss with Dan Cosgrove on **July 9th**	6/4/2012	Vassilis	n/a	Discuss	**discuss at S/W top of Meeting 7/9**		
	Review issues from GEM Sessions					**discuss at S/W top of Meeting**		
4632	Just had a question about pseudo-variables, Stefan was wondering about setting colors for pseudo variables. This is a features that we have not yet implemented. (You can set colors on pseudo variable components, but not at the top level).	5/21/2012	Pat	?	Aaron	4-8 hours with testing to add the custom colors feature for pseudo variables. Once in place it may be easier to add other similar features as well	4-8 hrs	
4669	(Not 8.2) The slices code should output percent progress to the status bar and/or IDL console. The processing times are usually short (< 1 second per cut for basic slices) but depending on data type and resolution they can be much longer. With the recent addition of averaging over multiple planes the time per slice can easily exceed 30 seconds, making progress reports necessary when taking multiple cuts.	6/7/2012	Aaron	?	Aaron		4-6 hrs	
4680	bug/feature annotation text justification	6/20/2012	Pat	1	Lydia	It looks like the text doesn't justify properly when doing annotations in the 10^x format. (In particular, it is right justified, which makes the text seem to bounce around. We should probably fix this, not sure about priority. Image showing the issue is attached. A brief note about the solution for whoever gets this: Using the left justify option for the IDLgrAxis object won't work because there is a bug with the left-justification such that the annotations will collide with the axis. Fixing this would probably entail guaranteeing that each exponent has the same number of characters. Right now, it clips trailing zeros, and doesn't do anything special for negative exponents. We would want a space added to any non-negative exponents and we would want to clip trailing zeros, only if it doesn't make the annotation shorter than any of the other annotations. Since the formatannotation routine isn't aware of how the other annotations are being formatted when it is being used as a callback by IDLgrAxis, we would probably need to add a preprocessing stage before the axis is drawn which would loop through all the annotations for the axis and determine how many zeros can be clipped and if a leading space needs to be inserted for non-negative exponents.	2-4 hrs	
4681	I came across some strange x axis tick behaviour and I'm not certain what is causing it. I can't reproduce it by repeating the same steps (but I do have a saved document), so it is probably not very important. I plotted some gmag data and set a marker on all panels and then chose subset-> marker. On the new page (page 4 of the attached THEMIS document), if I open y axis options and click apply (without changing anything) the tick labels change on the X axis.	6/20/2012	Lydia	?	?			
4682								
4683								
4684								
4685								
4686								
4687								
4688								
4689								
	v7.0 QA Tasks for Review with Vassilis							

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4551	Annotation precision with decimal notation was confusing for me eg I had two ticks at 452.59 and 0.148 when the precision was set to 1.234. When you click auto without changing the precision it changes the annotations to 452.6 and 0.1484	3/15/2012	Lydia					
4548	Panel options: But if I start by entering 99 for the Column value and click OK, I get the dialog message, and upon OK-ing it, the Panel options window will close. Now, returning to Panel options I see that the Column value is still 99, but changing it to anything else followed by an OK or APPLY doesn't change the actual plot. The only way now to change that Column value is via the "Cols Per Page" value in Plot/Layout Options.	3/15/2012	Ben			Formerly QA279. See also #4531 (consolidate layout options and panel options). Having this functionality in two places that must be kept synchronized is a bit complicated and error prone.		
QA280	Most option dialogs give a warning popup when invalid input is "OK"-ed, but close the option panel when the warning is dismissed.	3/15/2012	Ben			Formerly QA280. Original dialog should probably stay open so user can make the correction without having to reopen the dialog.		
4550	Major ticks by number/major ticks by interval: It might be nice to have major ticks by interval default to something logical rather than 1 n^1. If you change 'Major ticks every' then 'Major ticks by number' is updated to something that closely matches that interval, but the reverse isn't true. I'm not sure if we necessarily need 'Major ticks every' to update when 'Major ticks by number' is changed, but it might be good to have it default at the beginning to something that sort of matched.	3/15/2012	Lydia					
4545	Axis options: Major ticks by interval/Annotate every: For a non-time axis, switching between log/linear doesn't update the major tick every field as might be logical. ie. if you set to every 10000 n^1 on linear then switch to log it still tries 10000 10^n. Usually this means it fails to place any ticks/annotations if you switch between log/linear with either major ticks by interval or annotate every set.	3/14/2012	Lydia			Formerly QA271. If you have major tick every set and a mix of log and linear axes on the page and then use set all panels, you're bound to end up with no ticks on the panel with different scaling.		
4533	Plotting spectra with "Show Data Components" checked -- It might be nice to be able to plot the spectra by shift-clicking a subset of the components, for example if you wanted to only plot some of the bins.	3/2/2012	Lydia			Came up during SCM GUI test suite, step 12. (Test instructions will be changed, but it would be nice if this worked more intuitively.)		
4537	Deletion of data not reflected in saved/reloaded THEMIS document. Formerly QA206.	3/2/2012	Lydia		Pat	I loaded data for probes b and c and then went to plot the data and realised I should have loaded a and b for the tests. I returned to the load data panel and loaded the probe a data before deleting the probe c data. After saving as a themis document and reopening, the c data was loaded but not deleted. The data that was loaded and deleted using delete all data following the testscript does not appear when you reopen the document (as you'd expect).		
	General							
	Tips of the Month		David		David	Next Candidates: Lynn Wilson Routines; Eclipse auto pprocessing; FGM Reprocessing		
4664	Laptop locks UCB and UCLA	6/6/2012	David	0	Team			
4464	All plug-ins for v7.10 - add a section to User's Guide for Plug-ins	3/22/2012	David	1	David	Discuss at the appropriate time what the content would be. Also add a link for VM on the Software Web Page or Developers web page?		

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4647	I am reviewing a paper for GRL that uses THEMIS data incorrectly. Basically, the authors are trying to publish solar array switch spikes as evidence for DLs. I am sorry that I cannot give you more details. will notify the editors of this problem. However, it is entirely possible that such a paper could have been published and I want you to be aware of this problem. Perhaps a warning should be posted on the web site: (1) Axial boom data are not necessarily valid, particularly in the subsolar region. (2) THEMIS EFI data have unwanted "spikes" which come at four times per spin. These spikes are removed in released THEMIS data analysis programs, but the removal process can leave a residue.	6/1/2012	Bob Ergun - Colorado U	1	Emmanuel	Will discuss with David 6/18. All changes need to be approved by John Bonnell (very busy with RBSP at the moment).		
	Hannes							
4153	maintenance of gmag stations "Exclude List"	10/11/2010	David	0	Hannes	Exclude List to be updated week of 6/11/2012		
4018a	New Calibration FGM parameters and spin axis offsets	5/10/2010	Hannes	1	Hannes	**6/18/12 Hannes: Attached is a new thd FGM cal-file. Please reprocess thd from 2012-03-23 on. 6/20/12 Jim M: reprocessing started.**		
4080	Attitude Determination next few months	6/21/2010	Hannes	1	Hannes	**Should be updated by end of June 2012.**		
4472	Inter-spacecraft FGM calibration for ARTEMIS.	1/4/2012	Vassilis	1	Hannes	**6/4/12 from Hannes: Artemis inter spacecraft differences**		
2074c	quality flag for FGM data.**Dependencies on Ben's tasks 3093 and JWL's tasks 4142 and 2266.**		Vassilis	2	Hannes	quality flags for FGM data: Hannes talked to Ferdinand and suggests some flags in the state CDF: times when eclipse spin model adjustments were performed; times when spin fit & FGL data used to refine the eclipse spin model; times when V03 attitude corrections are available; times when spin fit timing had problems. Some of these flags already present in state CDF spin model variables. JWL will document in L1 file definition document. Final item not so easy, since we have trouble even detecting the timing problem in spin fits. Keep task open, **Vassilis says we can come back to it when we have clarity on the spin fit timing.**		
	Aaron							
4468	Ongoing - Review all commits by Davin, Peter, etc for impact to TDAS.	3/27/2012	David	0	Aaron	Provide weekly report and spreadsheet		
4493	2D slices, 1.5D Pitch Angle Distributions - command line in progress; GUI?	1/23/2012	Vassilis	1	Aaron	**Andrei will look at this after GEM. Xuzhi: looks good**		
4494	2D slices, 2D Pitch Angle Distributions - command line in progress; GUI?	1/23/2012	Vassilis	1	Aaron	**Andrei will look at this after GEM. Xuzhi: looks good**		
4503	thm_load_fgm does not throw error for invalid probe, only prints a message…should this be a more severe error?**Several datatypes and thire invalid does not tell you about third. Any error don't process any.**	2/3/2012	Ben	1	Aaron			
4463	file_http_copy support for proxy servers **talk to Lydia**	12/12/2011	IUGONET	1	Aaron	**item 3.3 from presentation - in progress**	1-3 hrs	
4464	mods for file_retrieve, determine remote & local parts from URL returned by query from metadata DB	12/12/2011	IUGONET	1	Aaron	**item 3.4.2 from presentation - in progress**	5-10 minutes	
4536	GUI Slices:Step 8 g) Annotation precision only changes z axis labels (not x, y) . Is that as intended?	3/1/2012	Lydia	1	Aaron	**Aaron completed analysis - it can be done.**	4 hrs	

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4673	Resolve duplicate/conflicting remove_zeros procedures	6/8/2012	Lydia	1	Aaron		4-6 hrs	
4653	version tests (win): save/load: The cadence spinner on the Time Interpolate Options window should be increased to 1.	6/4/2012	Aaron	1	Aaron		5-10 min	
4675	Excessive console messages from getspec. Example: "THM_SST_ATTEN_SCALE(63): Attenuator flags are invalid: 0" was repeatedly printed when producing a gyro spectrum for THA.	6/11/2012	Aaron	1	Aaron	Some may have been fixed post-TDAS 7.	1 hr	
4676	(Not 8.2) The fixed min/max spinners in the z-axis options window are slightly too large for their base, resulting in their labels being clipped a bit.	6/11/2012	Aaron	1	Aaron		10 min	
4677	(Not 8.2?) 2-d slices: Step 3 i) - as the test script says, there is no data, but it takes quite a while and seems to do other processing before telling you that there is no data	6/12/2012	Lydia	1	Aaron	**analysis only to determine level of effort**		
4641	thm_ui_part_getspec_options.txt:							
4641a	I think perhaps the testscript needs to be revised as it seems a bit out of date in places, and also a little confusing sometimes.	5/30/2012	Lydia	1	Aaron			
4641b	For the Angular Limits the invalid min/max behaviour is a bit counter intuitive: it truncates the value rather than setting to the last valid value. eg. 450 becomes 45.	5/30/2012	Lydia	1	Aaron	see 4646b	3 -4 hrs for all	
4641c	The processing can often take some time but an hourglass doesn't appear so it is not immediately obvious that it is busy processing stuff.	5/30/2012	Lydia	1	Aaron			
4646	bug reports getspec GUI suite							
4646a	When I try to plot a spectral quantity as a line plot, it uses the y-axis limit as the default, it should actually use the z-axis limit as the default. (Because a line plot for a spectral quantity actually ends up being an X v. Z plot not an X v. Y plot) This is a side-effect of our more thorough implementation of range defaults. Not a huge issue and easy to fix.	5/31/2012	Pat	1	Aaron			
4646b	It is a little weird that the getspec panel resets your settings to the last valid and then runs with last valid when you enter an invalid character or an out of range value, but if you set min greater than max, it refuses to run and requests that user correct the entry. I feel like it should correct user entry errors consistently.	5/31/2012	Pat	1	Aaron	**pop-up to warn users**		
4646c	11.b.i indicates that -20.5 is an invalid entry and should be reset. It actually isn't. It looks like this section was written for testing a valid range between [0,360] when the actual valid range is [-180,180]	5/31/2012	Pat	1	Aaron	**validate test instructions**	1-2 hrs	
4543	Axis options: With "bound autoscaling" or "floating center w/ span", allow units other than seconds for a time axis.	3/14/2012	Pat	2	Aaron	Floating center/span not very useful; probably exists only because SPLASH had it. Perhaps it could be removed?	1-4 hrs depending	
4505	Add a TDAS routine to do 1-d cuts - **when ready to work send Aaron Bennenman an email for clarity of task and then review at the S/W meeting again with Vassilis.**	2/6/2012	Aaron Breneman	2	Aaron	You could obtain a 1D cut of a slice by aligning the custom orientation vector (slice_orient keyword) such that the desired cut is along the x or y axis. The data could then be pulled directly from the array returned by thm_part_slice2d via the 'part_slice' keyword. This returns an R x R array containing the interpolated slice data (R=resolution). The x & y axis values for the array are returned in the 'xgrid' and 'ygrid' keywords.	1 hr	
4298	the slices code should probably have a keyword to use the new SST calibrations.	7/27/2011	Pat	2	Aaron	On hold till the SST calibrations have found wider use.		

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	Ben							
4616	Chile having download issues	4/26/2012	Marina Stepanova	0	Ben	**awaiting for them**		
3093	Automate processing of eclipse sunpulse data from FGM team	2/22/2010	Jim L	1	Ben	**Once prod reprocessing complete send announcement.**		
3093f	Update Admin Guide	2/22/2010	Jim L	1	Ben	**in progress (document automated processing)**		
3093g	production cron job	2/22/2010	Jim L	1	Ben	**testing in progress**		
3093h	Add diagnostic plots for FGL-FIT offset determination							
3093i	reprocess entire mission - notify Jim M and Tami before doing	2/22/2010	Jim L	1	Ben			
4458	Horae (rsync server for mirror sites) is dying and needs to be migrated to a VM Astrea2.**Once UCLA rsync done run SPDF test against UCLA Mirror Site.**	12/8/2011	Jon L	1	Ben	**in progress - they have new rsync**		
4458a	migrate Japan mirror site	40885	Jon L	1	Ben	**in progress - they have new rsync**		
4458b	migrate France mirror site	40885	Jon L	1	Ben	**in progress - they have new rsync**		Y
4458c	migrate Chile mirror site	12/8/2011	Jon L	1	Ben	**in progress - they have new rsync**		
4613	Prevent Email Storms when data servers go down	4/25/2012	Jim L	1				
4613c	Modify existing processing scripts to log to the database rather than send their own emails	4/25/2012	Jim L	1	Ben	cronwatch script converted, next will be VC, L0->L1, ephemeris, state V02, overview plot scripts.		
4316d	Admin guide update	6/8/2012	Jim L	1	Ben	Document log database, PHP scripts, and cron job for generating email notifications from database.		
	Cindy							
4358	Every 6 months check that the UCLA Mag Cal have not changed.	9/6/2011	David	0	Lydia	Next October 2012		
4481	New data product, AE index from THEMIS+std sites	1/9/2012	Vassilis	1	Cindy	**awaiting Russian data**		
4679	WIND test script: I might recommend this suite be put on a list for updating, there were a few instructions that could be confusing to a new tester (step3b, 3c, and 5d).	6/12/2012	Cindy	1	Cindy			
2027e	Finishing the coordinate transformation of the thm_load_state data at input, to include transformation of spinaxis attitude, need to determine keyword switch, implement the rotation of the spinaxis elevation/azimuth from gei to arbitrary coordinates (consult with Pat Vassilis)	7/1/2010	Vassilis	2	Cindy	**In progress 6/15/2012.**		
3086	add MACCS gmag data from 2007 to our data archive. We already have MACCS data for some years and a process that automatically downloads it/converts to CDF. So the task would involve finding missing files from 2007 and feeding them into our pre-existing processing framework. It should be pretty straightforward, but probably non-trivial because of learning curve/unexpected details.	2/19/2010	James Weygand	2	Cindy	**They are moving all the data to another server - on hold. Once they have completed the move we can get 2007 data and we will update scripts to handle the new data location. In progress as of 5/15/12 at their end. May take a while, if ever.**		

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2062	Alberta - At the moment the data files are from Dawson (daws), Churchill (fchu), Island Lake (isll) and Fort McMurray (mcmu). I will add Rabbit Lake and Taloyoak at some time but we have some issues with mag pointing at those 2 sites. If you recall, the agreement between Ian and Vassilis was that this data wouldn't be copied to become part of a mirrored archive like the existing data we provide. Instead, each file would be obtained from this site each time it is requested (using curl or some such). This means we can use our own logs to monitor data usage. Themis Software to be able to retrieve from Alberta		Vassilis	2	Cindy	**Waiting for CARISMA - our side coding done - run a test when data available**		
4409	AE Stations: I am interested in including the "standard AE ground stations" i.e. the ones that go into the computation of the AE index - there are 12 - into the THEMIS pipeline. This is because we can then include them into the computation of our own pseudoAE. They include: FCC: Fort Churchill, LRV: Leirvorgur, a couple in Russia and one in Scandinavia etc. They should be available somehow. The ones in Russia have been made available through APL, and THEMIS has contributed to their refurbishment. I think we have established communication with APL's Kazue Takahashi and he said a couple of years ago that routine delivery of the Russian stations was impending. So by now they should be ready…I think he should be a good source of information about the other stations as well, if you cannot find them on the web by searching or at WDC Kyoto.	10/19/2011	Vassilis	2+	Cindy			
4409b	Dixon (DIK) (AARI, Russia)	10/19/2011	Vassilis	2+	Cindy	**Downloads in progress. Data from 2011 on has been made available; they have agreed to provide data back to 2007. No 1 sec data available (minimum 1 minute sample interval).**		
4409c	Cape Chelyuskin (CCS) (AARI, Russia)	10/19/2011	Vassilis	2+	Cindy	see 4409b		
4409d	Tixie Bay (TIK) (AARI, Russia)	10/19/2011	Vassilis	2+	Cindy	see 4409b		
4409e	Cape Wellen (CWE) - closed, replaced with Pebek (?) (AARI, Russia)	10/19/2011	Vassilis	2+	Cindy	see 4409b		
4409l	Leirvorgur (LRV) (Iceland)	10/19/2011	Vassilis	2+	Cindy	**code to download and process is done and Iceland can make the data available. 5/10/12: Awaiting past data in zip file will be awhile.**		
778b	Need capability to read in ASCII. IDL has a built in widget to specify ASCII formats.	11/21/2011	Oldie	2	Cindy			
	Jim L							
4612	GOES 2008 Data	4/20/2012	Andrei Runov	0	Jim L / Ben	**Jim to sent email to Howard - on hold until data arrives. Email sent on xx/xx/12.**		
4027b	Reprocessing GOES Data	4/5/2010	Tami - SPDF	3	Jim L	Reprocessing on hold until Howard Singer delivers another batch of binary GOES data files. In conjunction with task 4612.		

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4637	Yesterday, we did a data dump on the flatsat, which contained a couple hundred packets of engineering data. We then "restored" the segment and dumped it again. Then we let data accumulate over night. This morning, we dumped the segment again, and while dumping sent the restore command. This test is essentially to see if the same data we dumped yesterday are available in the second dump and what effect if any sending the restore command during the dump might have had. Mark asked me to forward the two files to you. In the first, the first data dump after the first "restore". In the second, the second data dump with a "restore" while the dump was in progress. /home/jmcd/test_data/SSL.FLATSAT.TLM_VC3.2012_145_173946 .0 home/jmcd/test_data/SSL.FLATSAT.TLM_VC3.2012_146_182430. 0 (or do you need the other VC files, too?)	5/30/2012	John McDonald / Jim Lewis	0	Jim L	From what I saw in apid 410, it looks like the dump strategy worked as intended, and we got both copies of the original engineering segment contents, with no ill effects on the VC->L0 processing due to duplicated or out of order packets. Is that enough to declare success, or would you like me to look at some other apids? MOC wants to do some additional flatsat testing under various conditions;JWL to analyze test data and assess impact on apid 410 data. 1/2 hour per test.		
4034a2	thm_parts_moments update (spin moments mods)	11/22/2010	Vassilis	0	Jim L	initial simple way, final fix is to fix esa and sst 3D data structures Probably a good idea to make a THEMIS-specific moment calculation routine, to avoid extensive changes to WIND code currently being used. Jim McFadden (as of 3/26/12) said he would review what Jim L sends him. **Waiting on Ben to finish 3093 so I can start testing.**		
4509	Some array accesses still use () instead of [].	2/6/2012	A. Breneman	1	Jim L	**For example the ESA packet loading routines, thm_load_peif, thm_load_peeb. Work to be done when 4034a2 work continues**		
4326b	Then for Particles and Spin Fits	8/18/2011	Vassilis	0	Jim L	in progress - dependent on 4034a2.		
4326c	reprocessing for the moments and spin fits	8/18/2011	Vassilis	0	Jim L	**on hold 3093 is done (task 3093 assigned to Ben)**		
4667	(Not 8.2) If the user selects "No" on the prompt to overwrite an existing themis document a second dialog window pops up with the message "Save cancelled by user". This seems unnecessary.	6/7/2012	Lydia	1	Jim L	in progress - eta 6/22	10 min	
4670	Since the full distribution data is at 3 second resolution when we're in fast survey, we might want to consider stopping transmission of reduced distribution data when we're in fast survey. We could use the saved bandwidth to transmit reduced distribution data in 6 angle mode when we've in slow survey.	6/4/2012	Vassilis	1	Jim L	Requires flatsat testing & MOC support; on hold until NuStar launch/EOC.		
4451	operating the particle instruments in "accumulate" rather than "snapshot" mode. So we'd be getting into some unexplored territory. The time tagging code in the L0->L1 particle distribution processing would need some slight modifications to support "accumulate" mode. The ESA load routines use the L0 packets directly, and probably also assume "snapshot" mode, so that's another potential set of required modifications. I wouldn't be surprised if the ESA and SST calibration code also assumes snapshot mode. It would need to be tested with real data (since we have no way to generate a realistic particle data stream on FLATSAT).	12/1/2011	Vassilis	1	Jim L	5/21/12 as per Vassilis - give it a shot; Awaiting flatsat availability - after SST table updates and ESA energy table updates. Probably will have to wait until NuStar launch/EOC. **In Progress**		

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4451b	Modify instrument scripts to enable accumulate mode, flatsat testing	6/12/2011	Jim L	1	Jim L / Ops	When MOC support available, probably after NuStar.		
4451c	tdas mods - if accumulate mode approved discuss at S/W meeting	12/1/2011	Vassilis	1	Jim L	double chech slices and getspec as per Aaron**(next up)**		
4451d	Put one probe in accumulate mode and verify correct L0->L1 and L1->L2 processing with live data.	6/12/2011	Jim L	1	Jim L			
4142	issue with FGS processing - timestamps	9/30/2010	Vassilis	1	Jim L	not trivial		
2266	Timing of Spin Fit data	10/16/2009	Jim McFadden	1	Jim L	see 4142		
4476	Discuss thmsoc_dp_current deployment process, avoid unintended updates from trunk	1/5/2012	Jim L,David	1	Jim L	After QA, review CDF "software version" requirement with SPDF.		
4465	Diagnose, repair? Spikes in FGS data.	12/14/2011	Vassilis	1	Jim L	No code changes required. Document on web site (anomalies/watch out fors) as something to be aware of when		
4468	Modify ESA packet loading code to use standard spinmodel routines rather than deprecated ASCII files.		Jim L	1	Jim L	After TDAS 7.0.	1 day	
4430	crib for eclipse despinning code for spin fits and moments	11/9/2011	Jim L	1	Jim L	**on hold- demo exists;dependent on 3093**		
2074c	quality flag for FGM data -Jim L perform analysis, define task - someone else to do development		Vassilis	1	Jim L	quality flags for FGM data: Hannes talked to Ferdinand and suggests some flags in the state CDF: times when eclipse spin		
4034a3	awaiting feedback and performing analysis	11/22/2010	Vassilis	1	Jim L	Tips of the Month at some point?		
4236	Ferdinand P. suggests that we make available a diagnostic quantity produced by the eclipse spin modeling procedure. Add "phase" diagnostic quantity (from eclipse spin modeling process) to L1 STATE CDF, to give end users a sense of the expected angular error in the eclipse spin model.	5/23/2011	Ferdinand	1	Jim L		1-3 days	
2047	Separate E and B timestamps for spin fits: a) make a revised V02	before the	Vassilis	1	Jim L	**Hard for SPDF to deal with, with their plotting tools - review**		
4070	"Add support to thm_cotrans, ssl2gse, and ssl2dsl for /pseudo_dsl keyword. If keyword is present, look for and apply eclipse delta_phi corrections as appropriate."	6/1/2010	Jim L	1	Jim L	thm_load_fit and thm_load_mom, add keyword. In progress - **Will review code Davin checked-in concerning tensor quantities in thm_load_mom.**		
4030	cross-check SST psir6 and psif data types for excess counts in psir6	4/8/2010	Jim McFadden	1	Jim L	**Jim L talked to Davin and sounds like we can shut the data off. Jim L will send email on the time saved by shutting this off.**		
4030b	Correct Existing Data	5/17/2010	Jim McFadden	1	Jim L	4030a prerequsite		
4030c	If scripts change - make changes to processing scripts	5/17/2010	Jim Lewis	1	Jim L	4030a prerequsite	4-5 days	
QA110	as you know we have a few folks here in our SPDF group who are using the THEMIS-B and C data for a lunar project. They have found and I've confirmed through CDAWeb, that the time stamps and associated data measurements for October 9, 2010 THEMIS-B	2/7/2011	Tami	1	Jim L	Web Site - instruments will have a web page with "Sources of Data Anamolies". The first one being the ESA issue		
4286	Create and maintain a list of FBK and FFT (and possibly other?) configuration parameters versus time, to be used by other researchers to located time intervals containing data that was acquired in a particular configuration. Examples (totally made up): THEMIS A Filter Bank Source Selections: 2007-02-23 - 2008-01-01 e12dc, scm3; 2008-01-01 - 2008-05-01 scm2, e34ac; THEMIS A FFT configuration: 2007-02-23 - 2008-01-01 16 frequency bins, e12dc, e56dc, scm1, scm3; 2008-01-01 - 2008-05-01 32 frequency bins, e12dc, e56dc, scm1, scm3	7/15/2011	SPDF - Jim L	2+	Jim L	**phase 1 - list for next Tips of the month, phase 2 - cdf or web page: To be done before the Map in early 2013**		

Task #	Task Description	Date Opened	Reported By	Pri	Assigned To	Notes	Estimate	A&E; crib; script; suite; UG; DevG; Qref; AdmG
4301	"bad" themis thg l2 files - instrument files; L0->L1 processing produces incomplete/empty CDFs	8/1/2011	Tami	2	Jim L	**one fixed - one priority 2**		
2248	once in a while (maybe 10-20 occurrences per probe during the entire mission), the FGM range doesn't change on all three axes at once:	9/10/2009	Jim L	2	Jim L			
	Jim M							
4152	verify the location of the sun-contaminated bins for each spacecraft and any change in location over time(they should change very slowly if at all). They would then re-activate the sun contamination masking. It was previously disabled because the masking was originally in the from place. Davin said that he wants to create the new configuration files that would be uploaded to the spacecraft.	10/8/2010	Vassilis and Davin	0	Jim M	**Persons that can provide information are: Davin, Deron Pease/McDonald, Michael Luldam and Robert Abiad. Awaiting task 4365 (same process)**		
4152b	change the ESA tables such that the minimum magnetospheric electron energy becomes lower (about 3eV, or lower). McFadden can specify the lower energy	10/20/2011	Vassilis	0	Jim M	**only ARTEMIS probes - Need to talk to Jim McFadden. Also need MOC Support**		
4152c	change the ESA tables such that electrons and ions can be changed separately into magnetospheric and solar wind modes.	10/20/2011	Vassilis	0	Jim M			
4639	Also, there are a bunch of other calibration files that are used FGM and other instruments. The installation of these files is not detailed in the admin guide yet. I created a new section, with only one entry for this particular cal file type. If we want to be thorough, we should probably do the others.	5/30/2012	Pat	1	Jim M			
4658	version tests (win): save/load:: Received the following error while loading a themis document that tested replay of data processing: "VALUE_LOCATE: Array X does not have enough elements." Last IDL Error: % VALUE_LOCATE: Array X does not have enough elements. % Execution halted at: INTERPOL 161 C:\Program Files\ITT\IDL706\lib\interpol.pro % SMOOTH_IN_TIME 302 C:\Documents and Settings\aflores\Desktop\tdas_7_00\idl\ssl_general\misc\smooth_in_time.pro	6/5/2012	Aaron	1	Jim M	**in progress 6/15/2012**		
4663	version tests (mac): dproc: A high pass filter operation failed when loading a themis document. This occurred on IDL 8.2 (Mac) and 7.0.6 (Windows). Last IDL Error: % Illegal subscript range: ARRAY_X. % Execution halted at: TEMP_T_INTEGRATION 34	6/6/2012	Aaron	1	Jim M			
4003	Document: ESA File and Calibration Processing	3/5/2010	David	1	Jim M			

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4661	I tried to load 3dp datatype pm for 2012 - the testscript says to check availability at http://sprg.ssl.berkeley.edu/data/wind/3dp/ and test different combinations. There are cdfs for 3dp pm for 2012 on that site, but the have are _v05 and don't load. Should they load?	6/6/2012	Lydia	1	Jim M	**Peter Schroeder says that the v03, v04, v05 files are structurally identical. When a higher version file is produced, the lower versions are deleted. Suggests load routine should look for highest version. Or we could wait for an upcoming reprocessing, then have the load routine look for that specific version. For QA we can just stick to older data. Need input from Vassilis: worth the effort to make enhancements to the load routine for WIND?**		
4312	Quality flags for efi are wrong including electric field offsets in computation. **On hold until Michael Hartinger sorts out.**	8/8/2011	Vassilis	1	Jim M	**discuss with Vassilis**		
4233	Angular Correction for particle data - use Jim McFadden's code if available	1/9/2011	Vassilis	2	Jim M			
4241	Dieter and I have tested the variables, there are two that don't seem to have data for the mission, and their catdesc's seem to indicate that they won't... so can we "turn these off", or is there a plan to use them in the future? EFS_Q_MAG (Data Quality Parameter: set to NaN for EFS, as there is no good measure of data quality.) **EFS_Q_PHA (Data Quality Parameter: Set to NaN, as there is no good way to measure data quality for EFS data.)**	6/6/2011	Tami Kovalick	2	Jim M	They are empty at the moment, by design -- we may have a use for them in the future. Nothing needs to be done with SPDF. Look into EFS_Q_PHA and **check with John Bonnell about the future. If we add these variables notify SPDF.**		
2224	thm_load_mom: for quantities like velocity, the coordinate system isn't stored in the meta data, and none of the units are stored in the place we normally try to store them (from Pat - Vassilis concurs) Will take a look.		Vassilis	2	Jim M			
2035	Split L1 ESA (using Thomas's routine) in master ESA data cdf		Vassilis	2	Jim M	On Hold - awaiting Jim McFadden release: Then send David Sub Task List; Calibration variables removed from L1 data master CDF. (Side note: found and reported a bug in SKTEditor, which the Goddard team has agreed to fix...) Waiting for feedback from Jim McFadden about how calibration data should be handled (TH-A ASCII calibration file (used for all probes) doesn't match anything I removed from the data CDF).		
4208a	Enhanced MOM Instrument Web Pages	3/5/2010	David	2	Jim M	Talked to David first.		
	Lydia							

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4649	I see that the IDL 8.2 development environment now checks to see if there are multiply-defined routines on your IDL path. Below is a list of the duplicate definitions it finds in tdas_7_00. Many of them have more than one definition within TDAS, but some of the conflicts are with IDL 8.2 builtin routines.	6/1/2012	Jim L	1	Lydia	Most of these conflicts should be easily resolved: For conflicts between TDAS routines and IDL 8+ new features: Rename the TDAS routine and .pro file with a thm_ prefix, then find all references to the old name and update them by adding the prefix. For multiply defined routines within TDAS: Most of these are probably helper routines that didn't have their own .pro file; someone probably cloned the .pro file and left the helper function definition in place. For these cases, first check that the definitions are truly identical; if so, pull them out into their own .pro file and remove them from the two conflicting .pro files. If any of the "duplicate" routines have diverged since the fork, we would have to either merge both copies into a common routine that works for all call locations, or rename one of them and make sure the appropriate version is called everywhere. There may be references outside the originally conflicting .pro files, so that would have to be checked. 6/15/2012: Several conflicts resolved, asked Davin for input on what to do with ssl_general routines.		
4665	Laura confirmed that teachers used both the EPO jpg files from the data archive at http://sprg.ssl.berkeley.edu/themis/GEONS/ and also data in ascii format (though she was not certain from what website they obtained that).	6/6/2012	Laura P (EPO)	1	Lydia	ASCII file list processing restarted. Needs to be more efficient:. option 1: only generate lists for current year. Option 2: Replace filesystem search with database inserts/queries. Lydia to investigate feasibility of (2). 6/15/2012: Probably a hybrid approach (use database, restrict filesystem searches to current year) will be best. In progress. Also, we were missing some "joined" files from 2007, reprocessing in progress.		
	Pat							
	Updated FGM calibrations for solar array currents, ADC nonlinearity available?	5/30/2012	Vassilis	0	Pat	Last Recieved - May 2012. May need to remind FGM team if we go a long time without updates.		
4458	Create a set of Benchmark Tests against IDL future versions (now for v8.2 beta). Run these tests and produce a report. In addition present this report to Exelis in a web conference with a demo of TDAS. Benchmark Tests should include tests for PC, Mac (leopard and lion) and Linux O/S.	3/21/2012	David	1	Pat	Write up findings and present to Exelis		
4651	Received the following error while loading a themis document that tested replay of data processing events: "Add called without tplot variable" It looks like the replay failed to perform a join operation on a variable I had split and re-joined.	6/4/2012	Aaron	1	Pat	in progress		
4460	Add New Routines from Lynn Wilson	3/22/2012	Vassilis	1	Pat			
4460-1	Include: safe, minimal effort, obvious benefit. (21)		Vassilis	1	Pat		3-4 days	
4460-2	Documentation only: LW3 has documented a routine that didn't have documentation previously, but incorporating routine body is no worthwhile.(possible bugs or too much effort) (12)		Vassilis	1	Pat		1 day	
4460-4	Not sure: Need a scientist's opinion on the benefits of the routine. (26)		Vassilis	?	Pat	Vassilis will talk to Lynn Wilson and ask the benefits of these routines		
4460-5	Not sure: Need more programmer time to make confident recommendation. (14)		Vassilis	?	Pat	Vassilis will talk to Lynn Wilson and ask the benefits of these routines		

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4460-6	Helper, only include if required by an included routine. (9)		Vassilis	1	Pat			
4627b	SST: Andrei did some work that makes it look like we may need to look at the inter-anode calibrations for probes B & C.(This may be more Drew than me)	5/17/2012	Vassilis	1	Pat	**Complete 4627a - d by August 1**		
4627c	SST: We need to generate a combined spectrum product that includes the FTO(low) channel. This would be adding the FTO(low) channel to the F+FT combined spectrum that we've already created.	5/17/2012	Vassilis	1	Pat			
4267c	Write code to remove proton and electron contamination from the electron and proton distributions using data and efficiencies from the F & O channels.	6/27/2011	Pat	1	Pat	Working on noise removal, etc.		
4627d	SST: After #a-c are done, we need to reprocess SST L2 with sun contamination removed and new calibrations applied.	5/17/2012	Vassilis	1	Pat	need 4267c to be completed		
4002	Document: SST File and Calibation Processing	3/5/2010	David	1	Pat	**to be completed 9/30/12**		
4603	make new SST Cal standard	3/22/2012	Vassilis	1	Pat	Revisit in July ** on hold **		
4520	The bug that Drew had reported yesterday turned out to be not a bug, but because the bins that the sun decontamination code selected differed depending on the date selected and this wasn't clearly reported to the end-user. I put an informational message in to clarify what is happening, but after talking with Drew there are two other solutions that don't fit within the scope of QA, but would be good to consider later. There features are: #1 Add a keyword that returns the the bins that were flagged by automatic sunlight decontamination to the end user. #2 Provide an option to window the automatic sunlight decontamination code so that one test is not applied to the entire time period.	2/22/2012	Pat	2	Pat			
2060	L2 cdf Quality Flags: for SST		Vassilis	2	Pat			
4208b	Enhanced SST Instrument Web Pages	3/5/2010	David	2	Pat	See current ESA Instrument Web Pages - Make recommendations to Vassilis to improve.		